

Case Study (from Breathing Easy from Home to School: Fighting the Environmental Triggers of Childhood Asthma published by PolicyLink and The California Endowment, p.48)

School Buses are Hazardous to Children's Health: State Legislation to Limit Idling in Connecticut

Each day, 24 million students ride to and from school on buses. What most people probably don't know is that the buses are dangerous for children even when the vehicles aren't moving: the diesel emissions from idling buses pose a significant health hazard.

Environment and Human Health Inc. (EHHI), a Connecticut research and policy group, knew the dangers of idling buses in exposing children to diesel pollution. School teachers often complained that classrooms filled up with diesel fumes as the school buses idled, waiting for children to get on and off the bus. While there was an administrative regulation that limited idling time, the state didn't monitor or enforce it. Nor was there data showing the high levels of diesel emissions students were exposed to when buses idled.

EHHI decided to gather data themselves. They had fifteen students wear air monitoring equipment throughout their day. Working with scientists, they also compared emissions from moving and idling buses, analyzed differences between types of buses, and monitored the effect of having bus windows open and closed. They also measured the length of time buses idled.

The results were alarming. The air monitoring equipment worn by students showed that their exposure to diesel on the bus was 5 to 15 times their normal exposure. On average, school buses were idling for thirty minutes as students boarded the bus and another thirty as they unloaded. The buses were emitting diesel from the front and tail ends of the vehicles, filling the buses with diesel fumes. When the driver closed the doors, the diesel fumes were locked in with the children.

EHHI published a report summarizing its findings and took it to state lawmakers. Their highest priority was to prohibit bus idling. Connecticut's Department of Environmental Protection, the state's Parent Teacher Association (PTA), and the school bus driver's union all joined EHHI in supporting a new bus idling law. The data, coupled with the diverse coalition, made a compelling case—in 2002 the Connecticut legislature passed a law prohibiting school bus idling for more than three minutes.